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DOCKET NO.: 2343-169-27

ASSISTANT COMMISSIONER FOR PATENTS  
PO BOX 1450  
ALEXANDRIA, VA 22313-1450

Re: Serial No.: 10/608,228  
Applicant(s): Shiquan TAO, et al.  
Filing Date: June 30, 2003  
For: MOISTURE SENSOR BASED ON EVANESCENT WAVE  
LIGHT SCATTERING BY POROUS SOL-GEL SILICA  
COATING  
Group Art Unit:  
Examiner:

SIR:

Attached hereto for filing are the following papers:

INFORMATION DISCLOSURE STATEMENT  
PTO FORM 1449  
CITED DOCUMENTS (16)

Our check in the amount of \$ -0- is attached covering any required fees. In the event any variance exists between the amount enclosed and the Patent Office charges for filing the above-noted documents, including any fees required under 37 C.F.R. 1.136 for any necessary extension of time to make the filing of the attached documents timely, please charge or credit the difference to Deposit Account No. 50-1442. Further, if these papers are not considered timely filed, then a request is hereby made under 37 C.F.R. 1.136 for the necessary extension of time. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

PIPER RUDNICK LLP

Steven B. Kelber  
Attorney of Record  
Registration No.: 30,073

Raymond Millien  
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION: Shiquan TAO, et al.

GROUP ART UNIT:

SERIAL NUMBER: 10/608,228

EXAMINER:

FILED: June 30, 2003

FOR: MOISTURE SENSOR BASED ON EVANESCENT WAVE LIGHT SCATTERING BY POROUS SOL-GEL SILICA COATING

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. 1.97

Assistant Commissioner for Patents  
PO BOX 1450  
ALEXANDRIA, VA 22313-1450

Sir:

Applicant(s) wish(es) to disclose the following information.

REFERENCES

- Applicant(s) wish(es) to make of record the documents listed on the attached Form PTO-1449. Copies of the listed documents are attached, where required, as are either statements of relevancy or any readily available full or partial English translations of any non-English-language documents.

RELATED CASES

- Attached is a list of Applicant's(s') pending applications and issued patents which may be related to the present application. Copies of the documents, where required, are attached along with Form PTO-1449.

CERTIFICATION

The undersigned certifies that

- each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign or international patent office in a counterpart foreign or international application for the first time (to the knowledge of the undersigned, having made reasonable inquiry) not more than three months prior to the filing of this statement.
- no item of information contained in this Information Disclosure Statement was cited in a communication from a foreign or international patent office in a counterpart foreign or international application or, to the knowledge of the undersigned, having made reasonable inquiry, was known to any individual designated in 37 C.F.R. 1.56(c) more than three months prior to the filing of this statement.

BASIS FOR CONSIDERATION

This Information Disclosure Statement is filed:

- without fee and within three months of the filing date of the application.
- without fee and within three months of the date of entry of the U.S. national stage.
- without fee and before the mailing date of a first Office Action on the merits (to the knowledge of the undersigned).
- without fee and with the appropriate certification above.
- without fee and with a new CPA application.
- without fee and with a Request for Continued Examination.
- with fee and before the mailing date of any of a Final Office Action, Notice of Allowance or an action that otherwise closes prosecution (to the knowledge of the undersigned).
- with fee, appropriate certification above, and before payment of the Issue Fee.

DEPOSIT ACCOUNT

- Please charge any additional fees for the papers being filed herewith and for which no check is enclosed herewith, or credit any overpayment to Deposit Account No. 50-1442.

Respectfully submitted,

PIPER RIDNICK LLP



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Form PTO 1449 (Modified)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		DOCKET NO.  2343-169-27		SERIAL NO.  10/608,228	
LIST OF REFERENCES CITED BY APPLICANT (Use Several Sheets if Necessary)				APPLICANT  Shiquan TAO, et al.			
				FILING DATE  June 30, 2003		GROUP ART UNIT	
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	AA	4,634,856	1/6/87	Kirkham			
	AB	4,894,532	1/16/90	Peterson, et al.			
	AC	5,040,090	8/13/91	Birkle, et al.			
	AD	5,319,975	6/14/94	Pederson, et al.			
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)							
	AE	Raj, A.M. Edwin Suresh, et al., "Zinc(II) oxide-zinc(II) molybdate composite humidity sensor", Sensors and Actuators B 81, 229-236 (2002).					
	AF	Hypszter, Ryszard, et al., "Fiber optic technique for relative humidity sensors", SPIE Vol. 3054, 145-150 (1997).					
	AG	Jindal, Rajeev, et al., "High dynamic range fiber optic relative humidity sensor", Optical Engineering, vol. 41, (5) 1093-1096 (2002).					
	AH	Khijwania, S.K., et al., "Fiber optic evanescent field absorption sensor: Effect of fiber parameters and geometry of the probe", Optical and Quantum Electronics 31: 625-636, (1999).					
	AI	Tao, Shiquan, et al., "Porous solgel fiber as a transducer for highly sensitive chemical sensing", Optics Letters, Vol. 27, No. 16, 1382-1384, August 15, 2002.					
	AJ	Messica, A., et al., "Theory of fiber-optic, evanescent-wave spectroscopy and sensors", Applied Optics, Vol. 35, No. 13, 2274-2284 (May 1, 1996).					
	AK	Gloge, D., et al., "Weakly Guiding Fibers", Applied Optics, Vol. 10, No. 10, 2252-2258, October 1971.					
	AL	Lin, Binhua, et al., "Static and dynamic evanescent wave light scattering studies of diblock copolymers adsorbed at the air/water interface", J. Chem. Phys., 99 (10), 8308-8324, November 1993.					
	AM	Langley, Kenneth H., et al., "Light Scattering and Other Optical Methods", Experimental Methods in the Physical Sciences, Vol. 35, 263-300 (1999).					
	AN	Yang, Xin, et al., "Optical-fiber sensor for determining water content in organic solvents", Sensors and Actuators B, 3703, 1-5 (2001).					
	AO	Bonin, Hugues W., et al., "Design of a Neutron Gauge for the Detection and Measurement of Water Ingression in Flat Roofs", Nuclear Technology, Vol. 95, Sept. 1991.					
	AP	Al-Qadi, Imad, et al., "Using Microwave Measurements to Detect Moisture in Asphaltic Concrete", Journal of Testing and Evaluation, JTEVA, Vol. 20, No. 1, pp. 43-50, Jan. 1992.					
EXAMINER					DATE CONSIDERED		
<p>*EXAMINER: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.</p>							